



european energy
service initiative 2020

METHODOLOGY

for the EPC project evaluation

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Methodology for the EPC project evaluation

Within the framework of the project EESI2020 (European Energy Service Initiative 2020), which receives support from the program IEE (Intelligent Energy Europe) of the European Union, preparation is planned of a **database of best practice projects** addressed with the method of EPC (Energy Performance Contracting).

For creation of such a database, it is necessary to specify what aspects should contain the projects addressed with the EPC method, and what parameters should they meet.

The EPC method can be applied to projects that meet certain basic parameters. Among these parameters, we can cite primarily:

- Sufficient potential for energy savings.
- The need to modernise or rebuild energy facilities, or the renovation of energy system.
- An acceptable payback period for proposed measures (from achieved savings on operating costs related to energy consumption – optimally less than 8 years).
- Insufficient amount of own financial sources.
- The need for an expert partner for ensuring energy management.

For buildings suitable for inclusion in a project addressed with the EPC method, it is possible to achieve a significant lowering of operating costs for the consumption of all types of energy (heat, electricity, water) and implicitly as well the other operating costs related to energy consumption (maintenance, service, handling etc.). At the same time, reaching the maximum potential of savings in energy consumption in the case of projects addressed with the EPC method is contractually guaranteed by the supplier of such a project, i.e. the provider of energy services, with a guaranteed outcome.

For the selection of realised best practice projects, it is necessary to evaluate the projects in the widest possible scope, and provide a complete overview of them. The following summary of parameters suitable for evaluating realised EPC projects is divided into three categories:

- identification of the project,
- quantitative evaluation,
- qualitative evaluation.

Identification of the project

The goal of **project identification** is making an initial acquaintance with the evaluated project. In addition to basic information on the selected building(s), it provides primarily an overview of the proposed energy-conservation measures, including their specifications and the extent of the services provided.

Quantitative evaluation

Quantitative evaluation is first of all derived from the current energy consumption in the selected building(s). It is necessary to pay particular attention to this aspect, since it forms the basis for the proposal of the various effective measures and the subsequent calculation of savings, which are the most important criterion for the selection of a suitable EPC project.

In addition, it also focuses on the amount of investments, whether in the sum total or divided among the individual steps, as well as the method through which the project is financed.

Qualitative evaluation

The goal of **qualitative evaluation** is to select from the projects those of the most significant quality, for which the process and realisation was hindered by a minimum of barriers, and which in the entire course of its duration was burdened by the smallest possible risks, or if applicable a project in which such barriers and risks were resolved in an exemplary and repeated fashion.

At the same time, qualitative evaluation should reflect as well the satisfaction of the client with the solution and the results achieved. One other significant parameter is the possibility of applying the EPC method to other properties owned by the client.



QUESTIONNAIRE

Part I - project identification

Part I – PROJECT IDENTIFICATION	
1	Title of project:
2	Client:
3	Specifications of building(s) within the project framework:
4	Locality:
5	Brief description of realised energy efficient measures:
6	Completeness and extent of energy services provided:
7	Form of providing guarantees of savings:

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Part II – Quantitative evaluation

Part II – QUANTITATIVE EVALUATION			
1	Total amount of investments	€	
2	Amount of investments according to individual measures	€	
-			
-			
-			
-			
-			
3	Duration period of contractual relationship	years	
4	Duration period of payment of investment (if different from above)	years	
5	Method and structure of financing, and its conditions		
6	Annual consumption of energy and media before realisation:	technical units	€
Heat energy			
Electrical energy			
Water			
...			
7	Other operating costs associated with energy consumption before realisation (specific costs by type):	€	
8	Guaranteed savings of energy and media according to contract:	%	technical units
Heat energy			
Electrical energy			
Water			
...			

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9	Savings of other operating costs according to contract:	%	€	
10	Overall savings achieved per individual years:	%	technical units	€
1 st year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
2 nd year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
3 rd year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
4 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
5 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
6 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			

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	Overall savings achieved per individual years:	%	technical units	€
7 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
8 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
9 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
10 th year	Heat energy			
	Electrical energy			
	Water			
	...			
	Other operating costs			
11	Overall achieved savings in total:	€		



Part III – Qualitative evaluation

Part III – QUALITATIVE EVALUATION	
1	Importance of the building(s) in the region/city/locality:
2	Benefit to the client:
3	Repeatability of the project:
4	Added value (interesting points, first-ever achievement, etc.):
5	Barriers to establish the EPC project:
6	Barriers in the choice of ESCO:
7	Barriers in course of realisation:
8	Risks arising during project preparation:
9	Risks arising during project realisation:
10	Risks arising in the period of duration of contractual relationship:

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